HDA8004

4-CHANNEL AMPLIFIER
OWNER / INSTALLATION MANUAL

HDA8004 FEATURES & SPECIFICATIONS

- 50 watts x 4 channels RMS output power (4 ohm)
- 75 watts x 4 channels RMS output power (2 ohm)
- 150 watts x 2 channel RMS output power (bridged 4 ohm)
- Total dynamic output power: 800 watts
- Line level and speaker level inputs
- 2-ohm capable (stereo mode only)
- Bridgeable
- 80Hz/high pass electronic crossover
- Adjustable low-pass electronic crossover (50Hz-250Hz)
- Selectable bass boost
- Protection circuit (temp./output/voltage) with warning LED

Frequency Response:	20Hz ~ 20kHz
Signal to Noise:	Greater than 85dB (CEA 2006)
THD + Noise:	Less than .06% 20Hz ~ 20kHz @ 40hms
Electronic Crossover:	12dB/Ot. 50Hz~250Hz
Bass Boost:	+6dB or +12dB @ 45Hz
Impedance:	2~4 Ohms (Bridged mode: 4 Ohm ONLY)
Operating Voltage:	+14.4VDC (10~16VDC allowable)
Dimensions:	2.4''H x 9.5''W x 11.5''L

(Features and specifications are subject to change without notice.)

IMPORTANT/ PRELIMINARY

BEFORE YOU BEGIN:

- Read all instructions and cautions.
- Disconnect negative terminal of vehicle battery.

INSTALLATION PROCEDURES:

Plan your installation completely before beginning. Be sure you have all materials needed to complete your installation. Please call us with any questions before you start at: **1-800-621-3695 Ext. 3**

RECOMMENDED TOOLS & SUPPLIES (not included)

- Wire Strippers and Cutters
- Drill and drill bits
- Digital multi-meter
- Electrical tape
- An amplifier wiring kit with a fuse rating of at least 20 amps

LOCATION/MOUNTING AMPLIFIER

Select a safe dry location to mount your amplifier. Double check location and placement of amplifier before making any connections or drilling holes. Amplifier will generate heat. Be sure area is well ventilated. Never mount your amplifier in the engine compartment, or cover it with carpet or any other fabric materials that will cause the amplifier not to get the proper ventilation. Before securing amplifier be sure mounting area is clear of electrical wiring, fuel lines or any other obstructions. Be sure not to drill through electrical wires, fuel lines, or other obstructions that may be around your mounting area. If you have any questions or concerns, please contact our tech support team at **1-800-621-3695 Ext. 3**

STOP

IMPORTANT!

DO NOT RETURN PRODUCT TO THE RETAILER

IF YOU NEED ASSISTANCE OR REPLACEMENT PARTS

CALL US *TOLL FREE*: 1-800-621-3695 X3

HOURS MON-FRI *8AM-5:30PM (PST)* SATURDAY *8AM-2PM (PST)*

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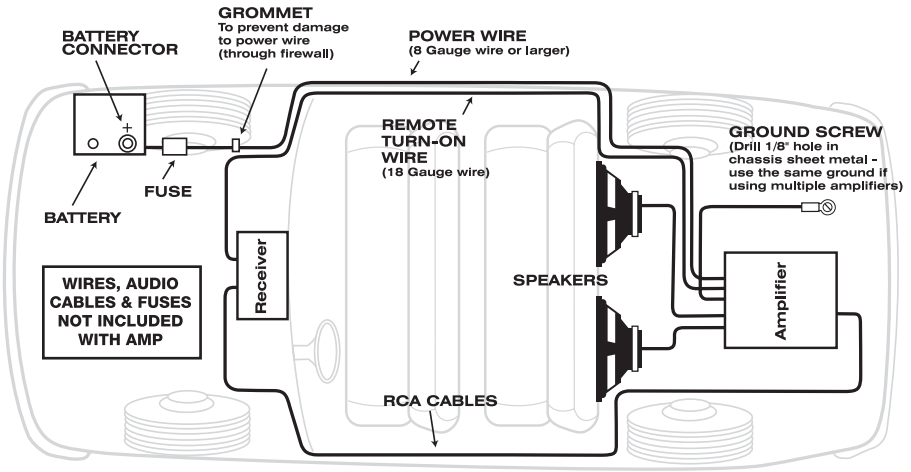
IMPORTANT/ PRELIMINARY

WARNING: BE SURE TO DOUBLE-CHECK ALL ROUTING LOCATIONS. DRILLING THROUGH ANY ELECTRICAL WIRES, FUEL LINES OR ANY OTHER VEHICLE SYSTEMS MAY CAUSE INJURY OR DEATH.

ROUTING CABLES AND WIRES

Determine the safest place to run wires through firewall. If it is necessary to drill holes be sure area is free of any obstructions on either side. Always use a grommet to protect wire. Be sure to route all wires and cables away from parts that may move or become hot. Excessive heat will damage the amplifier and wiring. Route power wires away from signal (RCA) cables. If power wires and signal cables need to intersect cross at a 90% angle. Route RCA cables away from wires that may carry high current.

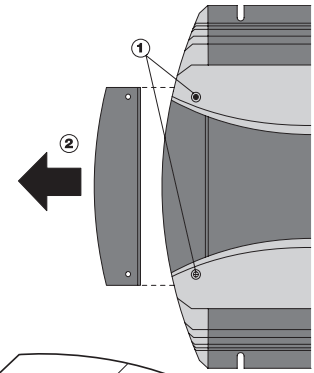


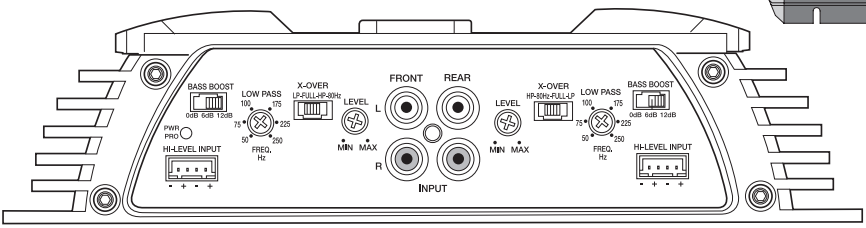
INPUTS / ADJUSTMENTS

AMP TERMINAL COVER PLATES

Before making connections, remove the the protective amp terminal covers as shown in the illustration at right.

1. Extract (2) Phillips screws.
2. Pull outward to unsnap and remove cover.
3. Replace covers after installation, final adjustments and testing.





AMPLIFIER STATUS INDICATOR

POWER: Illuminates GREEN when amplifier is on. No light indicates no power or insufficient voltage.

PROTECT: Illuminates RED when amp is in "Protect Mode" and indicates overheating, voltage overload or short circuit.

HIGH LEVEL INPUTS

For use with car stereos without low level (RCA) outputs. Low Level inputs are recommended if available (see Low Level Inputs below). If your car stereo has only High Level Output (speaker wires only), connect speaker output wires from your car stereo to High Level Inputs as indicated below.

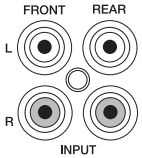
HIGH LEVEL INPUT HARNESS

White left front positive
White/Black left front negative
Gray right front positive
Gray/Black right front negative

LEVEL

The Level Adjust Control matches the output of your car stereo to the inputs on the HD Amplifier.

1. Turn stereo on and adjust the volume to about 3/4 of the stereo's maximum volume.
2. Carefully turn the Level control (by turning it from the "MIN" position on the HD Amp until the sound is just above your normal listening volume or near distortion (when the audio becomes garbled, breaks up or becomes unclear.
3. If there is excessive HUM or HISS between songs, the levels are set TOO HIGH and should be turned down (back toward "MIN").



LOW LEVEL INPUTS

Using Low Level (RCA) Inputs with the low level outputs from your car stereo is recommended, if available. If no low level outputs are available from you car stereo, see High Level Inputs above.

LOW PASS

Use the Low Pass frequency adjustment when the X-Over setting is set to the "LP" position for woofers and subwoofers. All frequencies below the user setting (50Hz ~ 250Hz) will be passed through to the speakers.

X-OVER

LP (low pass): Used to filter out all high frequencies and only use low frequencies. This setting may be used when the amp is used to drive subwoofers.

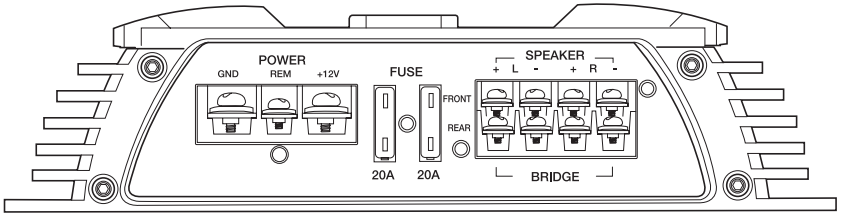
FULL (full range): Used when NO filtering is wanted. Amplifier will send a full range of frequencies to your speakers. Used when driving a set of full-range speakers.

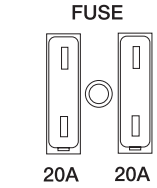
HP 80Hz (high pass): Used to filter out all low frequencies and only use high frequencies. This setting may be used when the amp is used to drive a set of seperate tweeters and midrange speakers, or full-range speakers. This setting is recommended when you have a dedicated amplifier and subwoofer for low fequencies.

BASS BOOST

Use the Bass Boost setting to boost low frequency sounds at 45Hz either by +6dB or +12dB. The 0dB setting is "off" or no low bass boost. Use caution when setting this adjustment as this can cause distortion or damage to speakers.

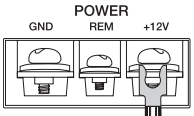
OUTPUT / POWER





FUSES

Use only specified fuses (two 20 amp fuses). **CAUTION:** Use of other than specific fuses may damage system or vehicle. Use of unspecified fuse will void warranty.



+12 VOLTS

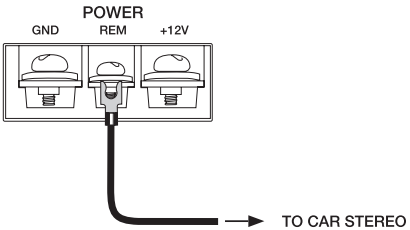
The high current lead for the amplifier must run directly to the positive battery terminal via a dedicated fuse block. Fuse should be mounted as close to positive battery terminal as possible. DO NOT connect to car's fuse block or wires from car's stereo. 8 gauge wire is recommended.

REMOTE TURN-ON CONNECTION (REM)

Remote Amp Turn-on

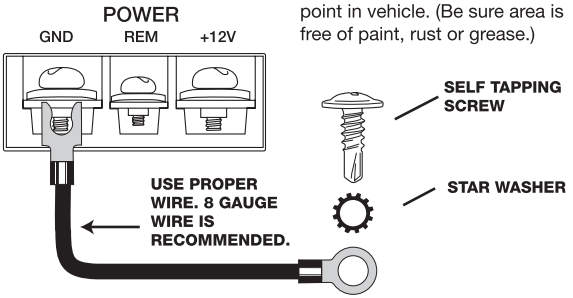
Connect to car stereo's remote amplifier turn-on lead. If car stereo does not have a remote amplifier turn-on: Connect to the car stereo's accessory wire. The accessory wire will have 12 volts while the ignition is in the "ON/Run" or "ACC" position and no voltage while Ignition is off.

CAUTION: Connection to a +12 constant source could cause cars battery to drain.



GROUND (GND)

The ground wire is a high current connection. This needs to be attached to a clean metal point of the vehicle. It should be attached with a "star" washer to a clean connection in the vehicle, capable of handling high current loads. Ground should be as close to amplifier as possible - no more than 3 feet from amplifier.

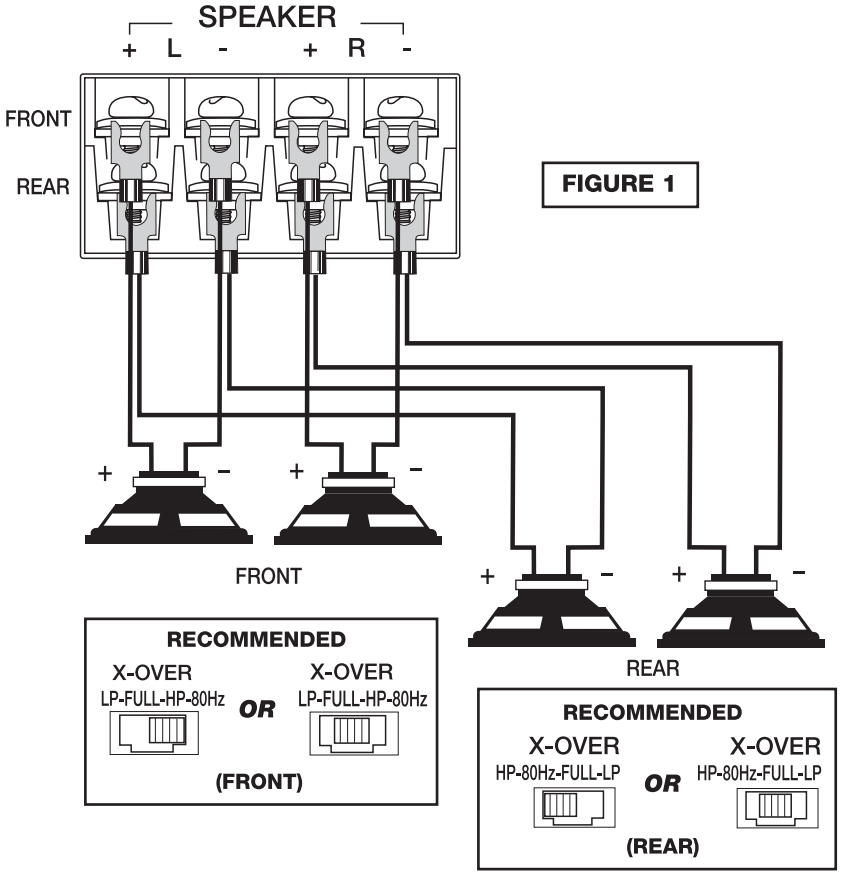

POWER
GND
REM
+12V
USE PROPER WIRE. 8 GAUGE WIRE IS RECOMMENDED.
Attach to a clean metal chassis point in vehicle. (Be sure area is free of paint, rust or grease.)
SELF TAPPING SCREW
STAR WASHER

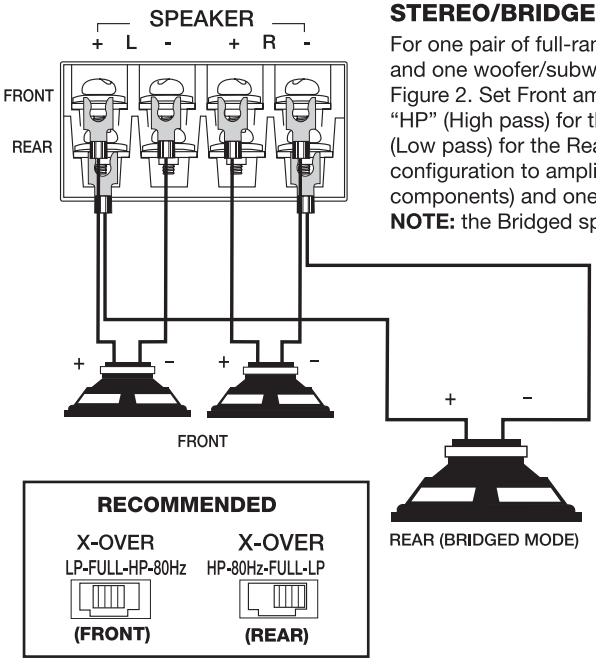
SPEAKER CONNECTIONS

Speaker connections are used to connect the speakers to the amplifier. Be sure speakers with the appropriate impedances are used. It is extremely important that the speaker wires are NOT connected to or touching the chassis (Ground) of the vehicle in any way. The (+) and (-) leads are not inner connected so the left channel (+) and the right channel (+) must remain independent. In addition, the (-) leads for the speakers CANNOT touch or be wired to the ground lead of the amplifier; this is NOT a "common ground amplifier".

STEREO 4-CHANNEL MODE

For two pairs of full-range speakers (or components), connect as shown in Figure 1. Set Front/ Rear amplifier crossovers to "FULL" or "HP" (High pass). Use this configuration to amplify two pairs of speakers in your vehicle.

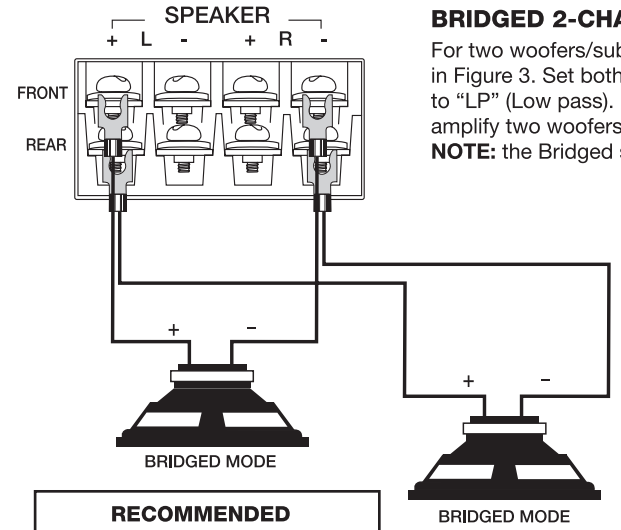




STEREO/BRIDGED 3-CHANNEL MODE

For one pair of full-range speakers (or components) and one woofer/subwoofer, connect as shown in Figure 2. Set Front amplifier crossover to "FULL" or "HP" (High pass) for the Front channels and "LP" (Low pass) for the Rear bridged channel. Use this configuration to amplify one pair of speakers (or components) and one woofer/subwoofer.
NOTE: the Bridged speaker must be 4 Ohm!

FIGURE 2



BRIDGED 2-CHANNEL MODE

For two woofers/subwoofers, connect as shown in Figure 3. Set both Front and Rear crossovers to "LP" (Low pass). Use this configuration to amplify two woofers or subwoofers.
NOTE: the Bridged speakers must be 4 Ohm!

FIGURE 3

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Amplifier will not turn on or no power (power LED not on).	No voltage on +12V input.	Use voltmeter to verify voltages at terminals of amplifiers +12V Input should have a minimum of 11.5 volts while ignition of vehicle is ON or OFF.
	No turn-On from car stereo.	Use voltmeter to verify voltage at terminal of amplifiers REM input. REM input should have 12 volts while car stereo is “ON” and 0 volts while “OFF”.
	Bad connection at battery or Fuse at battery.	Check main power connection and fuse at battery.
	Shorted speaker line or connections.	Disconnect all speakers but not +12V, GND or REM lines - if unit then turns on, a speaker or speaker line may be touching vehicle chassis. Check speakers and speaker lines for shorts.
Power but no sound (power LED is on).	Bad connection on RCA input or speakers not connected correctly.	Check low level (RCA) connections. Be sure they are connected at car stereo and amplifier. Check all speaker output connections.
	Incorrect speaker impedance overloading amplifier. LED may turn RED for this condition.	Disconnect speaker from amplifier. Verify speaker impedances. For Stereo/2-channel mode speakers should be 2 or 4 ohms each. For Bridged mode speaker(s) should be no less than 4 ohms. Speaker impedances can be found by checking speaker manufacturer specification or using a digital volt/ohm meter. For further assistance please call **800-621-3695 x3**.
No sound from one channel or entire side.	Car stereo’s balance and fader controls set incorrectly.	Check car stereo’s balance and fader control positions - verify they are centered.
	Bad connection at amplifier or speaker.	Check speaker connections at amplifier and speaker.
	Bad input via RCA or high level inputs.	Check all input leads at amplifier. Be sure RCAs are connected to car stereo and amplifier. Check high level inputs for connection to amp verify connections.
Very low sound level.	Car stereo’s balance and fader controls set incorrectly.	Check car stereo’s balance and fader control positions - verify they are centered.
	Amplifier’s input gain control setting is not correct.	Check amplifier’s input gain control settings - adjust levels if necessary.
Power amplifier turns on and off repeatedly.	Low voltage on +12V input or connections at battery.	Check +12V connections at the battery and amplifier inputs.
	Low vehicle battery voltage	Verify battery voltage. Voltage should be greater than 11.5 volts DC at amplifier with engine off.
	Bad connection on car stereo or amplifier.	Check car stereo and amplifier’s ground connections.
Amplifier turns off during loud or distorted passages, or Protection LED comes On.	Amplifier’s input gain control may be set too high or incorrectly.	Check amplifier’s input gain control settings - adjust levels if necessary.
	Low vehicle battery voltage.	Verify battery voltage. Voltage should be greater than 11.5 volts DC at amplifier with engine off.
	Bad connection on car stereo or amplifier.	Check car stereo and amplifier’s ground connections.
	Incorrect speaker impedances. LED may turn RED for this condition.	Disconnect speaker from amplifier. Verify speaker impedances. For Stereo/2-channel mode speakers should be 2 or 4 ohms each. For Bridged mode speaker(s) should be no less than 4 ohms. Speaker impedances can be found by checking speaker manufacturer specification or using a digital volt/ohm meter. For further assistance please call **800-621-3695 x3**.
Amplifier operates, but gets very hot.	Input gain control too high.	Lower gain control.
	Incorrect speaker impedances. LED may turn RED for this condition.	Disconnect speaker from amplifier. Verify speaker impedances. For Stereo/2-channel mode speakers should be 2 or 4 ohms each. For Bridged mode speaker(s) should be no less than 4 ohms. Speaker impedances can be found by checking speaker manufacturer specification or using a digital volt/ohm meter. For further assistance please call **800-621-3695 x3**.
	Not enough air circulation around amplifier. Amplifier is covered by carpet or other material.	Verify mounting location allows free air circulation around amplifier.

LIMITED WARRANTY

Scosche Industries Inc. warrants this product to be free from defects in material and workmanship for a period of 1 year from date of purchase.

DOA units can be returned to the selling retailer for exchange.

Units that have been installed for more then 30 days must be sent back to Scosche for repair. Consumers must call the Scosche 800 number for an RA number and pay to ship the unit back to Scosche. Scosche will then repair or replace the unit at our discretion and pay shipping cost to return unit back to customer. This warranty does not cover any expenses incurred in removal and reinstallation of the product in the vehicle.

This warranty is offered to the original purchaser of the product only. This warranty does not apply to product which has been water or physically damaged, damaged by accident or which has been misused, disassembled or altered, or installed improperly. If the product should prove defective within the warranty period, return the product with a copy of the sales slip, postage prepaid to:

Scosche Industries Inc.
1550 Pacific Ave
Oxnard CA 93033
Attn: Service Dept.

Your dated sales slip will establish your warranty eligibility. Scosche, at our option will repair or replace the product free of charge and will return the product to you postage paid. In no event shall Scosche be responsible for claims beyond the replacement value of the defective product or in any way be held liable or responsible for consequential or incidental damages.

No expressed warranties and no implied warranties, whether for fitness or any particular use, or otherwise, except as set forth above (which is made expressly in lieu of all other warranties) shall apply to products sold by Scosche. No waiver, alteration, addition or modification of the foregoing conditions shall be valid unless made in writing and signed by an executive officer of Scosche Industries Inc.

No salesperson, representative, or agent of Scosche is authorized to give any guarantee, warranty, or make any representation contrary to the above.